

## Multilayer detergent in melt block form

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AB The title detergents contains alkali metasilicate and alkali polyphosphate, is in the form of a block having layers of differing compn. and dissoln. rate, and is useful in mech. dishwashing, i.e., part of the block dissolves during the initial rinse step to enhance cleaning and part dissolves during the washing step. A two-layer detergent block was prepd. by casting .apprx.25 parts molten (57-60.degree.) mixt. of  $\text{Na}_2\text{SiO}_3 \cdot 9\text{H}_2\text{O}$  (I) 45.9,  $\text{Na}_2\text{SiO}_3$  45.9,  $\text{Na}_2\text{SO}_4$  4.45, adduct of 2 mol oxirane and 4 mol methyloxirane on 1 mol  $\text{C}_{12-18}$  fatty alcs. 3.6, and blue dye 0.15% in a mold, followed by .apprx.75 parts molten (57.degree.) mixt. of I 36,  $\text{Na}_2\text{SiO}_3 \cdot 5\text{H}_2\text{O}$  14,  $\text{Na}_5\text{P}_3\text{O}_{10}$  31,  $\text{Na}_2\text{SiO}_3$  18, and trichloroisocyanuric acid 1%. The dissoln. rates of the first and second layers in water at 15.degree. were 30 and 22.5 g/h.